

I/WE CLAIM:

1 1. A method comprising:

2 determining if a subject is trainable with respect to
3 the performance of a given activity.

1 2. The method of claim 1, further comprising:

2 determining a point of efficiency of a subject with
3 respect to at least one parameter.

1 3. The method of claim 1, further comprising:

2 exerting the subject at or near the point of efficiency
3 until a state of inefficiency with respect to the at least
4 one parameter or exhaustion occurs.

1 4. The method of claim 3, wherein the at least one

2 parameter is one of a physical parameter, emotional
3 parameter, and mental parameter of the subject.

1 5. The method of claim 4, wherein the at least one physical
2 parameter is selected from the group consisting of running
3 turnover rate, stride length, stride strike force, muscle
4 contraction speed, muscle contraction profile, muscle
5 contraction strength, weight lifted, electromagnetic
6 activity profile, chemical activity profile, body
7 temperature, and blood pressure.

1 6. The method of claim 4, wherein the at least one physical
2 parameter is selected from the group consisting of heart
3 rate, heart beat strength, respiration rate, VO_2 ,
4 perspiration rate, metabolic rate, blood flow, breathing
5 rate, heat given off, and breath length.

1 7. The method of claim 4, wherein the at least one
2 parameter is observed by a signal selected from the group of
3 verbal utterance, physical motion.

1 8. The method of claim 1, wherein the subject is selected
2 from the group consisting of an animal, a human, a group of
3 humans, a group of animals, a cellular automata, a group of
4 cellular automata, microbes, plants, and a computer program
5 and data.

1 9. A method comprising:
2 taking a measurement relating to at least one
3 continuous variable with respect to which a subject may
4 remain in a state of accommodation; and
5 training the subject so the value of the measurement of
6 the at least one continuous variable changes.

1 10. The method of claim 9, wherein the at least one
2 continuous variable is a quantity of time.

1 11. The method of claim 9, wherein a state of
2 accommodation includes at least one substantially consistent
3 parameter.

1 12. The method of claim 11, wherein the at least one
2 substantially consistent parameter is a physical parameter
3 of the subject.

1 13. The method of claim 12, wherein the physical parameter
2 is selected from the group consisting of running turnover
3 rate, stride length, stride strike force, muscle contraction
4 speed, muscle contraction profile, muscle contraction
5 strength, electromagnetic activity profile, chemical
6 activity profile, body temperature, and blood pressure.

1 14. The method of claim 12, wherein the physical parameter
2 is selected from the group consisting of heart rate, heart
3 beat strength, respiration rate, VO_2 , perspiration rate,
4 metabolic rate, blood flow, heat given off, breathing rate,
5 and breath length.

1 15. The method of claim 10, wherein the quantity of time
2 shortens or function thereof is less.

1 16. The method of claim 10, wherein the quantity of time
2 lengthens or function thereof is more.

1 17. A method comprising:

2 providing a performance system;

3 activating the performance system;

4 recording at least one parameter of the performance
5 system;

6 measuring at least one parameter of a subject;

7 determining an at least one point of efficiency

8 parameter by changing the at least one parameter of the

9 performance system until the at least one parameter of the

10 subject substantially changes beyond a given tolerance

11 function; and

12 training the subject at or near the point of efficiency

13 so the duration the subject can maintain the point of

14 efficiency changes.

1 18. The method of claim 17, wherein the at least one

2 parameter is a physical parameter.

1 19. The method of claim 18, wherein the physical parameter
2 is selected from the group consisting of running turnover
3 rate, stride length, stride strike force, muscle contraction
4 speed, muscle contraction profile, muscle contraction
5 strength, electromagnetic activity profile, chemical
6 activity profile, body temperature, and blood pressure.

1 20. The method of claim 18, wherein the physical parameter
2 is selected from the group consisting of heart rate, heart
3 beat strength, respiration rate, VO_2 , perspiration rate,
4 metabolic rate, blood flow, breathing rate, and breath
5 length.

1 21. An apparatus comprising:
2 a performance system;
3 at least one sensor for measuring at least one
4 parameter of a subject being trained or measured by the
5 performance system; and
6 a control system for controlling at least one parameter
7 of the performance system and for acquiring the measured at
8 least one parameter of the subject from the at least one
9 sensor.

1 22. The apparatus of claim 21, wherein the control system
2 determines when the subject reaches a point of efficiency.

1 23. The apparatus of claim 21, further comprising a timer
2 for recording an elapsed time.

1 24. The apparatus of claim 21, further comprising a memory
2 device for storing information and data other than the
3 parameter.

1 25. The apparatus of claim 24, further comprising a display
2 device for displaying the information and data other than
3 the parameter from the memory device.

1 26. The apparatus of claim 24, further comprising an output
2 port for transmitting information and data other than the
3 parameter from the memory device out to a printer or a
4 remote computer.

1 27. The apparatus of claim 21, further comprising an input
2 device for allowing an operator to enter commands into the
3 control system.

1 28. The apparatus of claim 27, wherein the input device is
2 selected from a group consisting of a keyboard, a mouse, a
3 microphone, an optical motion sensor, and a keypad.

1 29. The apparatus of claim 21, wherein the at least one
2 parameter of the subject is a physical parameter.

1 30. The apparatus of claim 29, wherein the physical
2 parameter is selected from the group consisting of running
3 turnover rate, stride length, stride strike force, muscle
4 contraction speed, muscle contraction profile, muscle
5 contraction strength, electromagnetic activity profile,
6 chemical activity profile, body temperature, and blood
7 pressure.

1 31. The apparatus of claim 29, wherein the physical
2 parameter is selected from the group consisting of heart
3 rate, heart beat strength, respiration rate, VO_2 ,
4 perspiration rate, metabolic rate, blood flow, breathing
5 rate, and breath length.

1 32. The apparatus of claim 21, wherein the performance
2 system further includes a device selected from the group of
3 a computer, a VCR, an auditory device, a visual device, a
4 connection to a transmission system, or combinations
5 thereof.

1 33. The apparatus of claim 32 wherein the transmission
2 system is selected from the group of internet, intranet,
3 telephone system, acoustic, short wave, satellite, cable TV
4 system, and combinations thereof.